

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1- 29 (Canceled).

30. (New) A microwave oven, comprising:

a housing including a front plate, a back plate and a base plate;

a cooking cavity mounted within the housing, wherein the cooking cavity is spaced above the base plate, and wherein sidewalls of the cooking cavity include a plurality of ventilation holes;

a door mounted on a front of the housing;

an electronic equipment chamber mounted within the housing;

a plurality of first intake ports located at a front of the microwave oven;

a plurality of outlet ports formed on a lower portion of the front plate;

a barrier positioned below the cooking cavity, wherein the barrier separates a space below the cooking cavity into an outlet duct and an outlet space; and

a circulation fan that draws air from outside the microwave oven into the first intake ports, wherein the fan generates a first flow of air that passes from the equipment chamber, into the outlet duct, and then out of at least one of the outlet ports, wherein the circulation fan also generates a second flow of air that passes from the equipment chamber through the cooking cavity via the ventilation holes in the sidewalls of the cooking cavity, into

the outlet space, and then out of at least one of the outlet ports, and wherein the barrier prevents the second flow of air from entering the outlet duct.

31. (New) The microwave oven of claim 30, wherein the plurality of first intake ports are formed in the door.

32. (New) The microwave oven of claim 31, wherein the plurality of first intake ports are formed on an upper surface of the door.

33. (New) The microwave oven of claim 30, wherein a communication port is formed in the barrier, the communication port allowing a portion of the first flow of air to pass from the outlet duct into the outlet space so that it mixes with the second flow of air before passing through the at least one outlet port.

34. (New) The microwave oven of claim 33, wherein the communication port comprises a plurality of apertures formed in the barrier.

35. (New) The microwave oven of claim 33, wherein the barrier further comprises an air guide part, and wherein the air guide part causes the portion of the first flow of air passing through the communication port to be guided towards the front of the microwave oven.

36. (New) The microwave oven of claim 35, wherein the air guide part is formed by cutting and bending a portion of the barrier.

37. (New) The microwave oven of claim 30, further comprising a second intake port formed on the back plate, wherein the circulation fan also draws air from outside the microwave oven into the second intake port to thereby form portions of the first and second flows of air.

38. (New) The microwave oven of claim 37, wherein the plurality of first intake ports are formed on an upper surface of the door.

39. (New) The microwave oven of claim 37, wherein a communication port is formed in the barrier, the communication port allowing a portion of the first flow of air to pass from the outlet duct into the outlet space so that it mixes with the second flow of air before passing through the at least one outlet port.

40. (New) The microwave oven of claim 39, wherein the barrier further comprises an air guide part, and wherein the air guide part causes the portion of the first flow of air passing through the communication port to be guided towards the front of the microwave oven.

41. (New) The microwave oven of claim 40, wherein the air guide part is formed by cutting and bending a portion of the barrier.

42. (New) The microwave oven of claim 30, further comprising a second outlet port formed in the base plate, wherein a portion of the first flow of air exits the microwave oven through the second outlet port.

43. (New) The microwave oven of claim 42, further comprising a second intake port formed on the back plate, wherein the circulation fan also draws air from outside the microwave oven into the second intake port to thereby form portions of the first and second flows of air.

44. (New) A microwave oven, comprising:

- a housing including a front plate, a back plate and a base plate;
- a cooking cavity mounted within the housing, wherein the cooking cavity is spaced above the base plate, and wherein sidewalls of the cooking cavity include a plurality of ventilation holes;
- a door mounted on a front of the housing;
- an electronic equipment chamber mounted within the housing;
- a first intake port located on an upper portion of the door;
- a second intake port formed in the back plate;
- a plurality of outlet ports formed on a lower portion of the front plate; and
- a circulation fan that draws air from outside the microwave oven into the first and second intake ports and uses the air to generate first and second flows of air, wherein the first flow of air passes from the equipment chamber, and then out of at least one of the outlet ports, and wherein the second flow of air passes from the equipment chamber, through the cooking

cavity via the ventilation holes in the sidewalls of the cooking cavity, and then out of at least one of the outlet ports.

45. (New) The microwave oven of claim 44, wherein the first intake port comprises a plurality of apertures formed on an upper portion of the door.

46. (New) The microwave oven of claim 44, further comprising a barrier positioned below the cooking cavity, wherein the barrier separates a space below the cooking cavity into an outlet duct and an outlet space, wherein the first flow of air passes through the outlet duct and the second flow of air passes through the outlet space, and wherein the barrier prevents the second flow of air from passing into the outlet duct.

47. (New) The microwave oven of claim 46, further comprising a communication port formed in the barrier, wherein the communication port allows a portion of the first flow of air to pass from the outlet duct into the outlet space.

48. (New) The microwave oven of claim 47, wherein the barrier further comprises a guide that causes the portion of the first flow of air passing from the outlet duct into the outlet space to be guided towards the front of the microwave oven.

49. (New) The microwave oven of claim 44, further comprising a second outlet port formed on the base plate, wherein a portion of the first flow of air exits the microwave through

the second outlet port.

50. (New) A microwave oven, comprising:

a housing including a front plate, a back plate and a base plate;

a cooking cavity mounted within the housing, wherein the cooking cavity is spaced above the base plate, and wherein sidewalls of the cooking cavity include a plurality of ventilation holes;

a door mounted on a front of the housing;

an electronic equipment chamber mounted within the housing;

a first intake port located on an upper portion of the door;

a plurality of first outlet ports formed on a lower portion of the front plate;

at least one second outlet port formed in the base plate; and

a circulation fan that draws air from outside the microwave oven into the first intake port and uses the air to generate first and second flows of air, wherein a first portion of the first flow of air passes from the equipment chamber, and then out of at least one of the plurality of first outlet ports, wherein a second portion of the first flow passes from the equipment chamber and then out of the at least one second outlet port, and wherein the second flow of air passes from the equipment chamber, through the cooking chamber via the ventilation holes in the sidewalls of the cooking chamber, and then out of at least one of the first outlet ports.

51. (New) The microwave oven of claim 50, wherein the first intake port comprises a plurality of apertures formed on an upper portion of the door.

52. (New) The microwave oven of claim 50, further comprising a barrier positioned below the cooking cavity, wherein the barrier separates a space below the cooking cavity into an outlet duct and an outlet space, wherein the first flow of air passes through the outlet duct and the second flow of air passes through the outlet space, and wherein the barrier prevents the second flow of air from passing into the outlet duct.

53. (New) The microwave oven of claim 52, further comprising a communication port formed in the barrier, wherein the communication port allows a portion of the first flow of air to pass from the outlet duct into the outlet space.

54. (New) The microwave oven of claim 53, wherein the barrier further comprises a guide that causes the portion of the first flow of air passing from the outlet duct into the outlet space to be guided towards the front of the microwave oven.

55. (New) A microwave oven, comprising:
a housing including a front plate, a back plate and a base plate;
a cooking cavity mounted within the housing, wherein the cooking cavity is spaced above the base plate, and wherein sidewalls of the cooking cavity include a plurality of ventilation holes;

an electronic equipment chamber mounted within the housing;
a door mounted on a front of the housing;
a plurality of intake ports located on an upper portion of the door;
a plurality of outlet ports formed on a lower portion of the front plate; and
a circulation fan that draws air from outside the microwave oven into the plurality of intake ports and uses the air to generate first and second flows of air, wherein the first flow of air passes from the equipment chamber, and then out of at least one of the outlet ports, and wherein the second flow of air passes from the equipment chamber, through the cooking cavity via the ventilation holes in the sidewalls of the cooking cavity, and then out of at least one of the outlet ports.

56. (New) The microwave oven of claim 55, wherein the plurality of intake ports are formed on a top edge of the door.

57. (New) The microwave oven of claim 55, further comprising a barrier positioned below the cooking cavity, wherein the barrier separates a space below the cooking cavity into an outlet duct and an outlet space, wherein the first flow of air passes through the outlet duct and the second flow of air passes through the outlet space, and wherein the barrier prevents the second flow of air from passing into the outlet duct.

58. (New) The microwave oven of claim 57, further comprising a communication port formed in the barrier, wherein the communication port allows a portion of the first flow

of air to pass from the outlet duct into the outlet space.

59. (New) The microwave oven of claim 58, wherein the barrier further comprises a guide that causes the portion of the first flow of air passing from the outlet duct into the outlet space to be guided towards the front of the microwave oven.